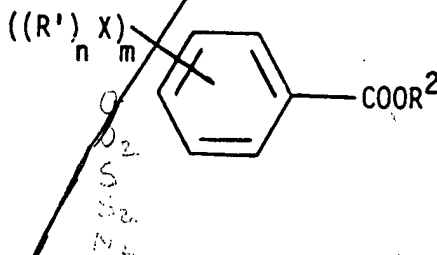


CLAIMS

What is claimed is:

1. A method for releasing a ligand from a complex thereof, said method comprising contacting a medium suspected of containing said complex with an effective amount of a compound of the formula:

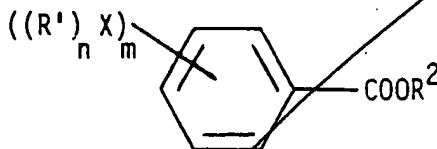


wherein R<sup>1</sup> is alkyl; R<sup>2</sup> is hydrogen or alkyl; X is O, S or N; n is 1 when X is O or S and n is 2 when X is N; and m is 1 or 2.

2. The method of Claim 1 wherein X is O.

3. The method of Claim 1 wherein said compound is methoxybenzoic acid.

4. In a method for the determination of an analyte that is a member of a specific binding pair in a sample suspected of containing said analyte, said method comprising the steps of (a) providing in an assay medium said sample and a binding partner for said analyte and (b) detecting the binding of said binding partner to said analyte, the improvement comprising including in said assay medium a compound of the formula:

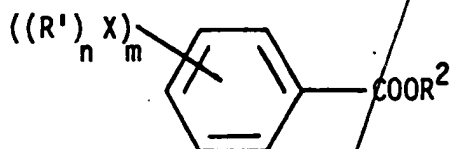


wherein R<sup>1</sup> is alkyl; R<sup>2</sup> is hydrogen or alkyl; X is O, S or N; n is 1 when X is O or S and n is 2 when X is N; m is 1 or 2 and wherein the amount of said compound is sufficient to enhance the accuracy of said determination.

5. The method of Claim 4 wherein X is O.

6. The method of Claim 4 wherein said compound is methoxybenzoic acid.

7. A method for releasing mycophenolic acid from a complex thereof, said method comprising contacting a medium suspected of containing said complex with an effective amount of a compound of the formula:



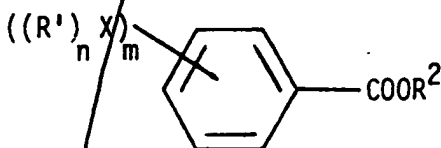
10  
wherein  $R^1$  is alkyl;  $R^2$  is hydrogen or alkyl; X is O, S or N; n is 1 when X is O or S and n is 2 when X is N; and m is 1 or 2.

8. The method of Claim 7 wherein X is O.

9. The method of Claim 7 wherein said compound is methoxybenzoic acid.

15  
10. The method of Claim 7 wherein said compound is o-methoxybenzoic acid.

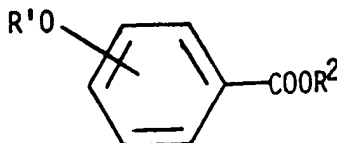
11. In a method for the determination of mycophenolic acid in a sample suspected of containing mycophenolic acid, said method comprising (a) providing in an assay medium said sample and a binding partner for mycophenolic acid and (b) detecting the binding of said binding partner to mycophenolic acid, the improvement comprising including in said assay medium a compound of the formula:



25  
wherein  $R^1$  is alkyl;  $R^2$  is hydrogen or alkyl; X is O, S or N; n is 1 when X is O or S and n is 2 when X is N; and m is 1 or 2; and wherein the amount of said compound is sufficient to enhance the accuracy of said determination.

30  
12. The method of Claim 11 wherein X is O.

13. The method of Claim 11 wherein said compound is methoxybenzoic acid.
14. The method of Claim 11 wherein said compound is o-methoxybenzoic acid.
15. The method of Claim 11 wherein said binding partner is an antibody.
- 5 16. The method of Claim 11 wherein step (a) further comprises contacting said sample with a labeled analog of mycophenolic acid.
17. The method of Claim 11 wherein said binding partner is bound to a support or capable of being bound to a support.
18. In a method for measuring the amount of mycophenolic acid in a sample suspected of containing mycophenolic acid and endogenous proteins that bind to said mycophenolic acid, said method comprising (a) combining in an aqueous medium:
- 10 (i) said sample
- (ii) mycophenolic acid conjugated to a detectable label, and
- (iii) an antibody capable of binding to mycophenolic acid, and
- 15 (b) determining the effect of said sample on the activity of said label, the improvement comprising including in said medium a compound of the formula:



wherein R<sup>1</sup> is alkyl and R<sup>2</sup> is hydrogen or alkyl in an amount effective in releasing said mycophenolic acid from said endogenous proteins.

- 25 19. The method of Claim 18 wherein said compound is methoxybenzoic acid.
20. The method of Claim 18 wherein said detectable label is an enzyme and said determining comprises measuring the activity of said enzyme.
21. The method of Claim 18 which further comprises combining in said combining step substrates for said enzyme.
- 30 22. The method of Claim 18 wherein said enzyme is selected from the group consisting of glucose-6-phosphate dehydrogenase and alkaline phosphatase.

23. The method of Claim 18 wherein said compound is o-methoxybenzoic acid.

24. The method of Claim 18 wherein said antibody is a monoclonal antibody.

25. The method of Claim 18 wherein said antibody is bound to a support or  
5 capable of being bound to a support.

26. The method of Claim 18 wherein said antibody is capable of distinguishing between mycophenolic acid and an ester thereof.

27. The method of Claim 18 wherein said antibody is capable of distinguishing between mycophenolic acid and a metabolite of mycophenolic acid.

10 28. The method of Claim 18 which is a homogeneous immunoassay and further comprises the step of (c) comparing said activity to the enzymatic activity observed with a sample containing a known amount of said mycophenolic acid.

29. A kit for conducting an assay for the determination of an analyte, said kit comprising in packaged combination:

15 (a) a binding partner for said analyte and  
(b) a compound of the formula:



20

wherein  $R^1$  is alkyl;  $R^2$  is hydrogen or alkyl; X is O, S or N; n is 1 when X is O or S and n is 2 when X is N; and m is 1 or 2.

25 30. The kit of Claim 29 which further comprises a compound comprising said analyte bound to a detectable label.

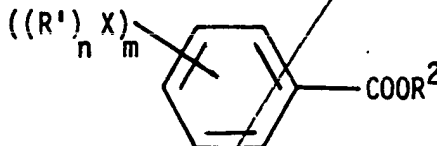
31. The kit of Claim 29 wherein said compound is methoxybenzoic acid.

32. The kit of Claim 29 wherein said binding partner is an antibody.

33. A kit for conducting an assay for the determination of mycophenolic acid,  
30 said kit comprising in packaged combination:

(a) an antibody capable of binding to mycophenolic acid,

- (b) a compound comprising mycophenolic acid bound to a detectable label, and  
(c) a compound of the formula:



10 wherein  $R^1$  is alkyl;  $R^2$  is hydrogen or alkyl; X is O, S or N; n is 1 when X is O or S and n is 2 when X is N; and m is 1 or 2.

34. The kit of Claim 33 wherein said compound is methoxybenzoic acid.  
35. The kit of Claim 33 wherein said compound is o-methoxybenzoic acid.  
36. The kit of Claim 33 wherein said antibody is a monoclonal antibody.  
37. The method of Claim 33 wherein said antibody is bound to a support or  
15 capable of being bound to a support.  
38. The method of Claim 33 wherein said antibody is capable of distinguishing between mycophenolic acid and an ester thereof.  
39. The method of Claim 33 wherein said antibody is capable of distinguishing between mycophenolic acid and a metabolite of mycophenolic acid.